

The question I was assigned:

**“Is remote analysis compatible
with ~~DØ~~ *US HEP* sociology?”**

slides at: www.pa.msu.edu/~brock/file_sharing/d0race_chip.pdf

so, what's the problem?

The primary problem is: How to be productive off-site?

A corollary problem is: Why try to be off site?

I imagine issues at two levels:

A. the why problem: largely one of US universities

B. the how problem: solvable within DØ?

I'll make some idiosyncratic comments on both
and then maybe we can have a discussion

why be off site? the obvious

day jobs

- teaching, dept responsibilities

travel

- expensive
- at least a working day wasted
- can be exhausting for traveler and families

but:

students and post docs are typically based @ FNAL

- hard for faculty to maintain stay up, day to day
- hard to bring up and maintain viable facilities without critical mass of post docs/students

why be off site? the less obvious

HEP is looking for \$B's again

- How our colleagues perceive us will be crucial
remember Mike Holland of OMB at Snowmass?
...what do your colleagues think of HEP?
- CMP, NP, ASTRO ...all are becoming Big Sciences
now, there is real competition for large \$

I know one thing that attracts negative attention

- our duty cycle on campus *“they’re never here...”*
*At our place: no post docs, no senior students...and
on Thursdays and Fridays (or more), no faculty*
...what about your place?

HEP on campus

Think about it:

- the next machine will be in Europe
- *the one after that...could be in Europe also*
- as departments look ahead, is academic investment in an absentee HEP obvious...when there's lots of other good physics?

Of course, we have a mantra:

- We invoke the “O” word* as encouragement: we'll pay back for support of our expensive facilities

that might help with the politicians

but, to encourage the support of our colleagues, I think an active presence at “home” might help

Now...Internally, within this experiment

Significant effort in at least four related projects:

- SAM
- video conferencing (task force long overdue)
- The Grid
- DØRACE, of course

All involve considerable current and future \$ and effort

Very welcome to groups from overseas

they will certainly make use of this effort

What about the US groups?

Are we capable of making full use of these efforts?

We're very lab-oriented, not campus-oriented

this is, in part, the sociological issue

imagine this future:

suppose it's 2003...with >5y of analysis left:

- data are available effortlessly anywhere in the world
- attendance at meetings doable, large and small, from anywhere in the world

pleasant, audible, responsive with bi-directional participation capabilities - you can give talks

- full software maintenance, anywhere in the world
- maybe even control-room and subsystem access??
over-the-shoulder or even realtime control?

With this future, consider two scenarios:

scenario 1: a viable group is with you at your university

scenario 2: you're still traveling: everyone stationed at Fermilab

which scenario would you choose?

um...I prefer Scenario 1

- I would dearly like to have a full-time group presence on the MSU campus during my dotage

good for me

good for department

good for HEP at MSU and, by extension,

good for HEP generally

Obviously, there are issues:

QUESTIONS:

Two scenarios

(stronger on-campus vs continuing on-site presence)

For each scenario is it:

1. good or bad for DØ?

- obviously, we can't deplete experiment of on-site people

2. good or bad for post docs?

- *on the one hand*: "where the action is" ...is generally felt to be the experiment, where futures are made. So are there real career issues? If so, can we mitigate them?
- *on the other hand*: many times post docs like to teach

3. good or bad for students?

- *on the one hand*: students obviously need to know their experiment
- *on the other hand*: students can become interrupt-driven—it can be tough to focus

QUESTIONS:

and

4. *What would it take to make a stronger on-campus presence acceptable for DØ, post docs, and students*

- some significant on-site rotation?
- technical capabilities, sure - realizing my imagined (idealized, but not crazy) 2005 future
- a different philosophy? ...maybe - I think “probably”

5. Can we find a model for deployment of people that works for most of us?

- I think we have to...

6. Do Europeans do this better?

- I would like to know this...